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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,206	04/21/2004	Che-Kuei Mai	1176/202	9032

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LIU & LIU
444 S. FLOWER STREET SUITE 1750
LOS ANGELES, CA 90071

EXAMINER

LESPERANCE, JEAN E

ART UNIT	PAPER NUMBER
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2629

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/830,206

Applicant(s)

MAI, CHE-KUEI

Examiner

Jean E. Lesperance

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-14 and 16-19 is/are rejected.
- 7) ☒ Claim(s) 7-10 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. The application filed April 21, 2004 is presented for examination and claims 1-19 are pending.

Claim Objections

2. Claim 1 is objected to because of the following informalities: "external ground" should be "an external ground". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 11-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 5,844,175 by Nakanishi et al. in view of US Patent # 5,153,572 (Caldwell et al.).

Regarding claim 1, Nakanishi et al. teach a touch panel input device (an analog – type transparent touch panel attached to a display device (column 1, lines 9 and 10), comprising:

a contact sensitive panel (touch panel (upper substrate (2), Fig.2 (400)); and
a grounding conductor conductively coupled to the contact sensitive panel and configured to be conductively coupled to external ground (the touch panel (400)

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includes 2 transparent conductive films (3a and 3b). Since the touch panel 400 is a resistive touch panel, the transparent conductive films have a difference in potential where the transparent conductive film (3a) can any number higher than 0V and the transparent conductive film (3b) is ground potential (grounding conductor) which is coupled to the upper substrate (2) of the touch panel (400). Accordingly, the prior art teaches all the limitations with the exception of providing a grounding conductor configured to be conductively coupled to external ground.

However, Caldwell et al. teach a ground shield (grounding conductor) (Fig.2 (42)) is directly connected or conductively coupled to the ground terminal (2) of connector (40).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the ground terminal (2) as taught by Caldwell et al. in the touch panel (400) disclosed by Nakanishi et al. because this would attenuate the pulses delivered from pad 36b to pin connector P1 and to attenuate the pulses delivered by pad 38b to pin 4 of connector P1.

Regarding claim 2, Nakanishi et al. teach the contact sensitive panel (the upper substrate (2) of the touch panel (400) (Fig.2)) comprises a first substrate exposed to contact by a user (upper substrate (2)) is touched by a finger or a pen, and wherein the grounding conductor is conductively coupled to the first substrate (the transparent conductive film (3b) which is a ground potential is coupled to the upper substrate (2).

Regarding claim 3, Nakanishi et al. teach the first substrate comprises a surface exposed to contact by the user (the upper substrate, Fig.2 (2) is touched by a finger or a

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pen, and a first conductive surface (2), wherein the grounding conductor is conductively insulated from the first conductive surface (the transparent conductive film (3b) which is a ground potential is insulated from the upper substrate (2) because they have other elements between them like the spacers (8) and they do not touch with each other at any point in touch panel (400) (see Figure 2).

Regarding claim 4, Nakanishi et al. teach the contact sensitive panel (the upper substrate (2) of the touch panel (400) (Fig.2)) further comprises a second substrate (lower substrate (1) electrically insulated from the first substrate (the upper substrate (2) and the lower (1) have the spacers (8) between them to maintain a predetermined distance which makes them electrically insulated from each other, and wherein the grounding conductor is conductively coupled to the second substrate (the transparent conductive film (3b) which is a ground potential is coupled or connected to the lower substrate (1).

Regarding claim 5, Nakanishi et al. teach the second substrate (lower substrate (1)) comprises a second conductive surface (the transparent conductive film (3b)), and wherein the grounding conductor is conductively insulated from the second conductive surface (the transparent conductive films have a difference in potential where the transparent conductive film (3b) can any number higher than 0V and the transparent conductive film (3a) is ground potential (grounding conductor) where the ground potential or grounding conductor is conductively insulated from the lower substrate (1).

Regarding claim 6, Nakanishi et al. teach the contact sensitive panel (upper substrate (2) of the touch panel (400) further comprises a second substrate (lower

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substrate (1)) conductively insulated from the first substrate (upper substrate (2)), wherein the second substrate (lower substrate (1)) comprises a second conductive surface (transparent conductive film (3b)) facing the first conductive surface (transparent conductive film (3a)), and wherein the grounding conductor is conductively coupled to the second substrate and conductively insulated from the second conductive surface (the transparent conductive films have a difference in potential where the transparent conductive film (3b) can any number higher than 0V and the transparent conductive film (3a) is ground potential (grounding conductor) where the ground potential or grounding conductor is conductively insulated from the lower substrate (1) and is conductively coupled to the lower substrate (1).

Regarding claim 11, Caldwell et al. teach the touch panel (touch panel Fig.2 (22)), wherein the grounding conductor comprises a generally loop shaped structure (the ground shield (42) form a loop since the two ground shields are connected together and they are connected to the ground terminal (2) of the connector (40).

Regarding claim 12, Caldwell et al. teach the generally loop shaped structure is a complete closed loop (the ground shield (42) form a loop since the two ground shields are connected together to form a close loop and they are connected to the ground terminal (2) of the connector (40) as shown in Figure 2.

Regarding claim 13, Caldwell et al. teach the loop extends along the periphery of the contact sensitive panel (the ground shield (42) form a loop since the two ground shields are connected together to form a close loop along the periphery of the touch panel (22) shown in Figure 2.

Regarding claim 14, Caldwell et al. teach the contact sensitive panel (touch panel, Fig.2 (22)) comprises sensing lines that facilitate sensing relative changes in electrical properties arising from user contact within an active area of the contact sensitive panel covered by the sensing lines (every touch panel that touched by the finger of a user or a pen and can detect the location of the finger or pen has sensing lines that help to detect relative changes in electrical properties arising from user contact within an active area of the contact sensitive panel covered by the sensing lines, wherein the grounding conductor (the ground shield Fig.2 (42) is conductively coupled to the touch panel (22) outside the active area covered by the sensing lines where (the ground shield (42) is located outside of the active area. The touch pads (30 and 32) locate in the active area and the ground shield (42) is located at the extreme ends of the touch panel 22.

Regarding claim 16, Nakanishi et al. teach a display element operatively coupled to the touch panel, wherein locations on an active area of the contact sensitive panel correspond to locations on a display area of the display element (an analog-type transparent touch panel attached to a display device, such as a liquid crystal display device, which allows the user to input data in accordance with the display on the screen by using a finger or a pen (column 1, lines 9-13).

Regarding claim 17, Nakanishi et al. teach the display element is at least one of liquid crystal display element, plasma display element and cathode ray tube element (an analog-type transparent touch panel attached to a display device, such as a liquid crystal display device, which allows the user to input data in accordance with the display

on the screen by using a finger or a pen (column 1, lines 9-13) where the display element is liquid crystal display element.

Regarding claim 18, Caldwell et al. teach a device controller coupled to the display system or the touch panel and configured to process data corresponding to an image to be rendered by the display system (an analog-type transparent touch panel attached to a display device, such as a liquid crystal display device, which allows the user to input data in accordance with the display on the screen by using a finger or a pen (column 1, lines 9-14), where a display device that allows a user to input data in accordance with the display on the screen by using a finger or a pen inherently has a device controller.

Regarding claim 19, Caldwell et al. teach the electronic device comprising at least one of a portable device, a display monitor and a user input device (a touch panel, Fig.2 (22) which is a user input device).

Allowable Subject Matter

4. Claims 7-10 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to a touch panel.

Dependent claim 7 identifies a uniquely distinct feature "the grounding conductor comprises a first conductive layer on the first substrate on the same side as the first

conductive surface, a second conductive layer on the second substrate on the same side as the second conductive surface, wherein the first and second conductive layers are conductively coupled”.

Dependent claim 15 identifies a uniquely distinct feature “the grounding conductor comprises a first section attached to the contact sensitive panel, and a second section extending from the first section to the external ground”.

The closest arts, Caldwell et al. and Nakanishi et al. as discussed above, either singularly or in combination, fail to anticipate or render obvious the above limitations obvious.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

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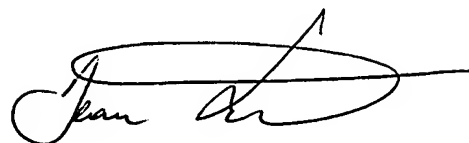
drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

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Date 1/22/2007

A handwritten signature in black ink, appearing to read "Jean Lesperance", with a long horizontal flourish extending to the right.